



Dock, t: 03-011

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Lucien Alfred Couvillon, Jr.
Application No.: 10/631,872
Date Filed: 07/31/2003
Title: Ultrasonic Imaging Catheter
Group Art Unit.: 3737
Examiner: Unassigned
Atty. Docket: 03-011

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop DD
Assistant Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office.

I. COPIES

- a. ☒ A legible copy of (i) each U.S. and foreign patents; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.
- b. ☐ Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number

U.S. Filing Date

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. ☒ Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).
- b. ☐ A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. ☐ The following additional information is provided for the Examiner's consideration:

III. ☐ CROSS REFERENCE TO RELATED APPLICATION(S)

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does (do) not waive the confidentiality provisions of 35 U.S.C. §122.

Serial No.

Filing Date

Art Unit

FEES

- IV. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)

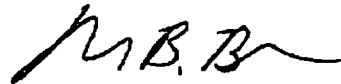
- a. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.
- b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required.
- c. ☒ before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required.
- d. ☐ before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.
- V. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box)
before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)).
- a. ☐ No statement; therefore, charge deposit account 50-1047 the fee set forth in 37 C.F.R. §1.17(p).
- b. ☐ See the statement below. No fee is required.
- VI. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(d):
on or before payment of the issue fee and is accompanied by the following:
- 1) a statement under 37 C.F.R. §1.97(e) as provided below; and
- 2) charge deposit account 50-1047 the petition fee set forth in §1.17(p).
- VII. ☐ STATEMENT UNDER 37 C.F.R. §1.97(e) (check only one box, if applicable)
The undersigned hereby states that
- a. ☐ each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or
- b. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or
- c. ☐ some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.
- VIII. PAYMENT OF FEES
- ☐ A check in the amount of _____ is enclosed for the above-identified fee(s).
- ☐ Please charge Deposit Account No. 50-1047 in the amount of \$180.00 for the above-indicated fee(s).
- ☒ If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 50-1047.
- ☐ Two Copies of this paper are attached for Deposit Account charges and debits.

It is Applicant(s)' opinion that the claims presently on file patentably distinguish the present invention from each of these references. The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates

the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-1047.

Respectfully submitted,



David B. Bonham
Attorney for Applicant(s)
Reg. No. 34,297
Tel.: 703-433-0510
FAX: 703-433-2362

MAYER FORTKORT & WILLIAMS
Customer Number 27774

Enclosures: ☒ PTO/SB/08
☒ References
☐ Foreign Search Report
☐ Other:

Certificate of Mailing by First Class Mail

I certify that this document and fee is being deposited

1/23/04

with the U.S. Postal Service as first class mail

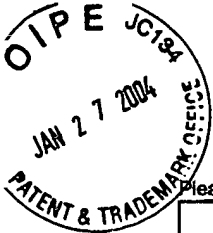
under 37 C.F.R. 1.8 and is addressed to the Mail Stop DD, Commissioner for
Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Signature of Person Mailing Correspondence

Joanne Ryan

Typed or Printed Name of Person Mailing Certificate



Docket No.: 03-011

Please type a plus sign (+) inside this box. FORM PTO/SB/08

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/631,872		
		Filing Date	07/31/2003		
		First Named Inventor	Lucien Alfred Couvillon, Jr.		
		Group Art Unit	3737		
		Examiner Name	Unassigned		
Sheet	1	of	4	Attorney Docket Number	03-011

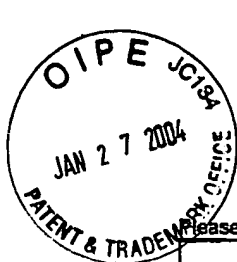
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY
		Number	Class/Subclass		
	1.	6,457,365 B1	73/626	Stephens et al.	10/01/2002
	2.	5,651,366	128/662.06	Liang et al.	07/29/1997
	3.	5,268,082	204/282	Oguro et al.	12/07/1993
	4.	5,000,185	128/662.03	Yock	03/19/1991
	5.	6,249,076 B1	310/363	Madden et al.	06/19/2001
	6.	6,109,852	414/1	Shahinpoor et al.	08/29/2000
	7.	5,556,700	428/332	Kaneto et al.	09/17/1996
	8.	5,250,167	204/299	Adolf et al.	10/05/1993
	9.	6,586,859 B2	310/309	Kornbluh et al.	07/01/2003
	10.	6,583,533 B2	310/309	Pelrine et al.	06/24/2003
	11.	6,545,384 B1	310/309	Pelrine et al.	04/08/2003
	12.	5,682,897	128/662.06	Pomeranz	11/04/1997
	13.	5,771,902	128/897	Lee et al.	06/30/1998
	14.	5,855,565	604/104	Bar-Cohen et al.	01/05/1999
	15.	5,865,178	128/660.03	Yock	02/02/1999
	16.	5,897,522	604/20	Nitzan	04/27/1999
	17.	5,938,609	600/439	Pomeranz	08/17/1999
	18.	6,060,811	310/311	Fox et al.	05/09/2000
	19.	6,074,349	600/463	Crowley	06/13/2000
	20.	6,376,971 B1	310/363	Pelrine et al.	04/23/2002
	21.	6,514,237 B1	604/533	Maseda	02/04/2003
	22.	6,543,110 B1	29/25.35	Pelrine et al.	04/08/2003
	23.	5,372,138	128/662.06	Crowley et al.	12/13/1994
	24.	US 2002/0120297 A1	607/2	Shadduck	08/29/2002

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Date of Publication of Cited Document MM- DD-YYYY	T
		Office ²	Number ³	Class/Subclass		
	1.	WO	01/58973 A2	C08G	SRI International	08/16/2001

Examiner Signature	Date Considered
-----------------------	--------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.



Docket No.: 03-011

Please type a plus sign (+) inside this box. FORM PTO/SB/08

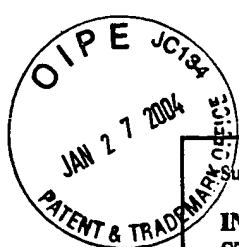
Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/631,872		
		Filing Date	07/31/2003		
		First Named Inventor	Lucien Alfred Couvillon, Jr.		
		Group Art Unit	3737		
		Examiner Name	Unassigned		
Sheet	3	of	4	Attorney Docket Number	03-011

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1.	Jose-Maria Sansinena et al., <i>Electroactive Polymer (EAP) Actuators as Artificial Muscles</i> , chap. 7, Conductive Polymers (SPIE Press, 2001), pp. 193-221.	
	2.	David L. Brock, "Review of Artificial Muscle based on Contractile Polymers." www.ai.mit.edu/projects/muscle/papers/memo1330/memo1330html .	
	3.	Edwin H. Jager et al., "Microfabricating Conjugated Polymer Actuators," <i>Science</i> , Vol. 290, Nov. 24, 2000, pp. 1540-1545.	
	4.	Yoseph Bar-Cohen, "Transition of EAP material from novelty to practical applications – are we there yet?" <i>Smart Structures and Materials 2001: Electroactive Polymer Actuators and Devices</i> , Yoseph Bar-Cohen, ed., Proceedings of SPIE, Vol. 4329, 1-6.	
	5.	American Medical Systems. Important Information for Patients Considering an Acticon Neosphincter. www.fda.gov/ohrms/dockets/ac/01/briefing/377b1_02_patient%20info .	
	6.	Yoseph Bar-Cohen, Chap. 1, EAP History, Current Status, and Infrastructure, <i>EAP Actuators as Artificial Muscles</i> (SPIE Press, 2001), pp. 3-44.	
	7.	Yoseph Bar-Cohen, ed., <i>Electroactive Polymer (EAP) Actuators as Artificial Muscles: Reality, Potential, and Challenges</i> , chap. 16: Application of Dielectric Elastomer EAP Actuators. SPIE Press (2001), pp. 457-495.	
	8.	Yoseph Bar-Cohen, ed., <i>Electroactive Polymer (EAP) Actuators as Artificial Muscles: Reality, Potential, and Challenges</i> , Chap. 21: EAP Applications, Potential, and Challenges. SPIE Press (2001), pp. 615-659.	
	9.	WorldWide ElectroActive Polymers (Artificial Muscles) Newsletter, Vol. 3, No. 1 (June 2001), pp. 1-14	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.



Docket No.: 03-011

Substitute for form 1449A/PTO		Complete if Known	
		Application Number	10/631,872
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	07/31/2003
		First Named Inventor	Lucien Alfred Couvillon, Jr.
		Group Art Unit	3737
		Examiner Name	Unassigned
		Attorney Docket Number	03-011
Sheet	4	of	4

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	10.	John D.W. Madden et al., "Polypyrrole Actuators: Modeling and Performance," <i>Smart Structures and Materials 2001: Electroactive Polymer Actuators and Devices</i> , Yoseph Bar-Cohen, ed., SPIE Proceedings, Vol. 4329 (March 5-8, 2001), pp. 72-83.	
	11.	Ron Peltine, "Applications of Dielectric Elastomer Actuators," <i>Smart Structures and Materials 2001: Electroactive Polymer Actuators and Devices</i> , Yoseph Bar-Cohen, ed., SPIE Proceedings Vol. 4329 (March 5-8, 2001), pp. 335-349.	
	12.	John D.W. Madden et al., "Conducting Polymer Actuators as Engineering Materials," <i>Smart Structures and Materials 2002: Electroactive Polymer Actuators and Devices</i> , Yoseph Bar-Cohen, ed, SPIE Proceedings, Vol. 4695 (2002), pp. 176-190.	
	13.	Eniko T. Enikov et al., "Electrotransport and Deformation Model of Ion Exchange Membrane based Actuators," <i>Smart Structures and Materials 2000: Electroactive Polymer Actuators and Devices</i> , Yoseph Bar-Cohen, ed, SPIE Proceedings, Vol. 3987 (2000), pp.129-139.	
	14.	Rainer W. Gulch et al., "Electrochemical Stimulation and Control of Electroactive Polymer Gels," <i>Smart Structures and Materials 2001: Electroactive Polymer Actuators and Devices</i> , Yoseph Bar-Cohen, ed, SPIE Proceedings, Vol. 4329 (2001), pp. 328-334.	
	15.	T. Hagiwara et al., "Enhancement of the Electrical Conductivity of Polypyrrole Film by Stretching: Influence of the Polymerization Conditions," <i>Synthetic Metals</i> , vol. 36 (1990) pp. 241-252.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.